Dr. Joseph Markowitz received his undergraduate training in mathematics at Wesleyan University and his Ph.D. in Psychology from the University of Pennsylvania.

During this period, he also worked on problems of visual lunar landing for the Apollo Program at Bellcom, a Bell Labs subsidiary that provided systems engineering services to NASA.

Subsequently, he became manager of the Psychology department at BBN just as the ARPANet—Internet predecessor—was being designed and built. Concurrently, Dr. Markowitz taught at Northeastern University.

After a brief stint as Vice President, Computer Systems for Medicine, Dr. Markowitz joined the staff at the Massachusetts Institute of Technology. At MIT, he managed a large, DARPA-funded applications project on Multics, and lectured at both Sloan School and the School of Architecture and Planning.

In 1975, Dr. Markowitz joined the Central Intelligence Agency. During his tenure at CIA, Dr. Markowitz managed Analytic Methods in the Office of Research and Development, and then managed Current Production and Analytic Support—which prepared daily briefings for the President and provided all mapping and cartography services.

He served as the first Director of the Systems Integration Office, an Intelligence Community enterprise which executed a sensitive, Presidentially mandated program.

He served as the first Director of the Technology Management Office in CIA's Directorate of Operations.

He served as the first Director of the Intelligence Community Open Source Program Office. While there, Dr. Markowitz architected and managed a 6000-subscriber, sensitive but unclassified, worldwide intranet. He designed a terminal, approved at CIA, that allows a user to dynamically connect to a TS/SCI network and the public internet, and to import files without leakage of classified information. Coupled with an innovative work paradigm, this effectively solves the multi-level security problem.

Dr. Markowitz served as the first Technical Director of the Information Operations Technology Center—co-located with the National Security Agency at Fort Meade, Md.—during his last year of Government service.

In the course of his government service he was awarded, *inter alia*, the Distinguished Intelligence Service Medal, the National Intelligence Medal of Achievement, and the Distinguished Career Intelligence Medal. He now serves as a private consultant and holds current Top Secret and SCI security clearances.

Dr. Markowitz also has served or is serving on a number of Defense Science Board Task Forces on topics as diverse as: The National Imagery and Mapping Agency (NIMA); Globalization and National Security; Military Training; Psychological Operations; Information Warfare Defense; and, Intelligence Support to Civil Support.